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Scope
Section D

High heating bills are gone for a while, but now there's the cost of cooling and summer driving to confront.

State Journal/Amy Wallot

It's summer in Frankfort and that means air conditioning and road trips. But with energy prices on the rise, filling up at the pump and paying the monthly bills will take an even bigger chunk out of those paychecks. Greg Guess, assistant director for the Kentucky Division of Renewable Energy and Energy Efficiency, sat down with Stafff Writer Haley Beck to discuss ways Frankfort residents and business owners can be more energy efficient while saving money this summer.

Q&A

Greg Guess
Energy adviser

What sorts of energy issues do you think are most important today?

Oh I think probably most people look at three different things. Supply, price and environmental impact … of course price and supply are intertwined, as we have less supply available relative to demand the price goes up. That's one of the things we're experiencing right now, a lot of Americans are experiencing that crunch.

For instance, in the last couple of years we've looked at gasoline prices. If we compare what our prices are today, a national average, we're looking at about $2.89 a gallon. In June of 2002, just four years ago, it was $1.39 a gallon, so we're looking at a $1.50 difference. What that translates to is if you're driving say 12,000 miles a year and the vehicle gets maybe 15 miles per gallon, you're spending an extra $1,200 a year in gasoline costs. So your earning power has to be $1,500-$1,800 in order to pay an extra $1,200 for gasoline. Allan Greenspan, former chairman of the Federal Reserve Board, characterized it as a huge sort of hidden tax basically, and that's what it is. So it costs us a lot of money.

As we look at how we use fossil fuels we know that there's an impact in terms of direct pollution, nitrogen oxides, sulfur oxides in the atmosphere, things that are precursors to the ozone. Problems (we are) having, particularly in our larger cities, and also wherever we're using it, do contribute to global warming as it produces carbon dioxide and that's a global warming gas. That's being recognized more and more as a problem that we need to confront.

Do you think we're headed toward an energy crisis?

Some people would say we're probably already in a crisis to some extent. The crisis component again deals partly with supply. Partly with the impact in terms of global environment and local environments and partly with issues like national security because right now we import 65 percent of our petroleum. When we're that dependent on imports from other countries that means we are kind of at the mercy of the world market and if something happened to that then it would have a severe impact on not only our on national security but our national economy. So we perhaps aren't at that point yet and there may be things that we can do to avoid getting to that point but there is that very real possibility that our economy and the rest of the world's economy could be threatened by significant reductions in oil supplies worldwide.

For residents of Frankfort, what are options for saving energy at home in the summer months?

Well there are several things that can be done and there are some good sources for information. We've got some publications that we make available out of our office. Some of them are from the U.S. Department of Energy. We have information on our Web site and we publish information in the newsletters.

The Energy Star program, which is a federal government program that we're a partner in, offers a lot of information in different ways. Energy Star is basically a program that was put together by the U.S. Department of Energy and the U.S. Environmental Protection Agency. What it does is it sort of brands energy efficiency so that if you go out and buy a product and it's one of the products labeled with an Energy Star then you know that probably is going to be more efficient than other products that don't have that Energy Star label.

But in addition to things like the dishwashers and refrigerators, computers and a whole variety of appliances and equipment that are labeled, Energy Star also labels buildings. You can have an Energy Star house, you can have an Energy Star school, (or) an Energy Star office building, and that simply means that these buildings perform in the top 25 percent of buildings of their type across the country. So that's a very useful thing to know and it's an easy thing for the individual consumer to look at. So if you're going to buy a new refrigerator ask for one that's an Energy Star. If you're going to build a house build one that's an Energy Star rated house.

Our Web site at *www.energy.ky.gov* has links to all these kinds of programs and the one for Energy Star is particularly good for homeowners. We have some tips on renewable energy and energy efficiency. The Energy Star Web site is simply *www.energy.ky.gov* and when you get to that site there's an icon in the middle of the page toward the bottom that says, 'Cool your world with Energy Star at home' and it brings up an icon that you click on and it's interactive. It shows a typical home and all the elements within that home. So for instance if you're looking at the utility room area, you click on that you'll get a box that comes up and it talks about different sorts of appliances that might be in a utility room or in your basement including things like your washer and your dryer. If you click on each of those it gives you some things you can do.

Caulking, weather stripping, making sure you don't have areas where there are drafts in the home – That's really the first and most cost effective thing you can do. Then you can look at things like adding insulation. For any homeowner a very simple thing to do is just replace some of your light bulbs, conventional incandescent light bulbs, with what's called compact fluorescent bulbs. People have seen these in the stores and they come in different shapes and different types but they only use about one-fourth of the energy that a regular light bulb uses and they last about 10 to 13 times as long. They cost a little bit more initially but the savings over the life of the bulb can be significant, probably as much as $25.

Are there any specific things that business owners can do?

Business owners can do a lot of the same kinds of things. Business owners who buy equipment for instance can buy Energy Star equipment. If they're looking at building a new building they can design and build more efficient buildings. There's a whole architectural community out there that can work with them in doing that. In their business operations they can look at doing the same kinds of things that you as an individual might do. Cut back on how you use energy, simple things – even just turning off lights. In a school building, for instance, as much as 25 to 40 percent of the total electric consumption in a school building typically is for lighting. If students and teachers walk out of a room and they're not in that room for an hour and they leave the lights burning then that's a waste.

What we tell people in terms of conservation or energy efficiency (is that) we're not asking people to do without. What we are asking is get the services they want whether it's cool air, or warm air, or light, or whatever, but do it in the most efficient way you can. Simple things as just turning off switches when you leave rooms and be consistent about that will save people money whether it's in the home or a business.

Are there any specific things people can do when driving their cars?

There are a bunch of things. First, if you're buying a car, buy one that's more fuel-efficient. Again the Energy Star Web site that I talked about earlier has some information, and actually we have some information on our Web site about a car. Go to our homepage, which is *energy.ky.gov*, and then click on the "energy efficiency" tab on the left hand column and then "energy saving tips" and look at transportation, for instance. We have a whole list of gas saving tips from our division and we have a link to different places where you can look at information.

The first thing is buy a fuel efficient car if you have that opportunity. Second thing is don't take the trip if you don't need to take it. Consolidate your trips so instead of doing three or four trips at different times of the day or three or four different trips in a week, consolidate all of those into one. If you can car pool or ride share, do that. Again that keeps you out of the car.

But if you are in a car the simple things are obey the speed limit. Generally cars are more efficient in the range of 50-55 miles an hour so if you're exceeding the speed limit you're inefficient in terms of the gas that you use. If you have Jack Rabbit starts and jerky stops, those kinds of things consume more fuel. If you're out on the highway use cruise control because that helps you even the amount of fuel that you're using. One of the things they recommend is don't pack things on top of the car. If you're driving at highway speeds the car's aerodynamics help you be more fuel-efficient. Don't put extra weight in your car. Some people in the winter put extra weight in their car for traction and that kind of thing but if you're carrying extra weight around in your car it takes more fuel for you to go wherever you drive.

The other thing that's important is a very simple thing is check your tire pressure. If you keep your tires inflated to the proper amount it'll make a two or three percent difference in the fuel mileage. All these things add up so those are all good things to look at.

Are there any emerging technologies that people should be aware of?

There are probably some technologies that are coming out. Again things like compact fluorescent lamps that replace the standard incandescent bulb. I wouldn't call that emerging technology. It's a technology that's already here and it's already been widely used and has been for the last eight to 10 years or so but a lot of people still aren't using it. In other countries you see that used much more frequently. So that's one technology that is available right now.

There are other technologies; a lot of the things are just small incremental changes in existing technology. The refrigerators for instance are much more efficient now than they were 10 years ago. If you've got older refrigerators in your house for instance, a lot of people will buy a new refrigerator and they'll stick the old one in the basement or the garage. They need either to get rid of that refrigerator or else replace it with a new one. It will actually pay them over a period of five years or so replace a 10 or 15-year-old refrigerator with a new refrigerator, particularly Energy Star, simply because it's much more efficient and they'll save that much on their electric bill. There have been improvements in heat pumps, for instance, that people use to heat and cool their homes but those have been incremental improvements rather than major jumps but now you can buy much more efficient heat pumps than people were buying five, seven, 10 years ago.

Is there anything else you think people should be aware of or to keep in mind for the summer?

The things you do in the summer are some of the same things you do in the winter. I think the main thing that people probably need to understand is that we're all kind of in this situation together and for us to get out of it, everybody needs to do their own part. It's really important that people understand that they can make a difference. They can make a difference in their bills and what they're paying and then as a group.

One of the things I did want to mention, in February 2005 Gov. Fletcher published his Comprehensive Energy Strategy and it addresses some of the same issues that we've been talking about and it contains 54 recommendations that we in state government are looking at to improve the way that energy supplies are handled in Kentucky and the way that we promote energy policy in Kentucky. The first area it deals with in terms of specific goals is renewable energy and energy efficiency so that's a very key part of the recommendations. It's something that we're heavily involved in and it calls for us to work with other agencies to promote energy efficiency in state government, which we are doing. We have programs that deal with education and curriculum that we're working with. Part of what people can do is visit our Web site, click on Kentucky's Energy Strategies or their energy plan. People can take a look at that and see how state government is working to be more energy efficient and then that may suggest things that they can do themselves.

Guess on...

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Conservation without discomfort: "What we tell people in terms of conservation or energy efficiency (is that) we're not asking people to do without. What we are asking is get the services they want whether it's cool air, or warm air, or light, or whatever, but do it in the most efficient way you can."

No exercise in futility: "It's really important that people understand that they can make a difference. They can make a difference in their bills and what they're paying and then as a group."

About Greg Guess

Age: 59
Education: B.A. in history, University of Kentucky.
Career: Serves as assistant director for the Kentucky Division of Renewable Energy and Energy Efficiency, Kentucky Office of Energy Policy. Also served as associate director of the Kentucky Petroleum Council, the state office of the American Petroleum Institute, from 1981-1987.
Family: Wife, Debra Guess; two dogs, two cats.
Greatest accomplishment: Seeing sustainable building practices being adopted in Kentucky.